Amendments to the Claims

Docket: CU-4509

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) A method for setting, in a motor vehicle electrical power steering system which includes a vehicle steering column and a steering assistance motor, a set point of an assistance torque that must be applied to the steering column by the motor, the steering column having an upper part bearing a steering wheel and a lower part which acts on a mechanical steering device, the method including:

obtaining information concerning torque exerted on the steering wheel by measuring a first angle with a first sensor at the steering wheel and a second angle with a second sensor at the lower column part,

comparing the first and second angles measured, taking into account rigidity of the steering column between locations at which the first and second angles are measured;

computing the load on the steering wheel by comparison of positions of the first and second sensors; [[and]]

computing variation of the load on the steering wheel with respect to speeds of rotation of the first and second sensors, PID filtering of the first and second angles measured to obtain torque information for computation of the set point of the assistance torque to be applied to the steering column by the assistance motor; and applying said set point to the steering column by the assistance motor.

- 2. (previously presented) The method according to Claim 1, including measuring the angle, speed, and acceleration of the steering wheel and the position, speed, and acceleration of the assistance motor acting on the lower part of the steering column.
- 3. (previously presented) The method according to Claim 2, including verifying validity of the first and second angles.
- 4. (previously presented) The method according to Claim 1, including testing

PATENT Docket: CU-4509

whether recalibration of the assistance function is possible and necessary, if not, returning to measuring of magnitudes.

- 5. (previously presented) The method according to Claim 4, wherein, if recalibration is possible and necessary, computing a new compensation with regard to a midpoint position of the steering wheel, and, if necessary, recomputing play in a reducing gear associated with the motor, and returning to measuring of the magnitudes.
- 6. (previously presented) The method according to Claim 4, including testing for recalibration based on at least passage of the steering wheel through a zero position, the speeds of the steering wheel and of the motor, which must be less than a predetermined threshold, upon a determination that no degraded mode is in progress, on validation of data obtained during the measuring.
- 7. (previously presented) The method according to Claim 1, wherein, between the upper part and the lower part of the steering column, a torque rod is provided, and rigidity of the torque rod is taken into account in setting the set point.
- 8. (previously presented) The method according to Claim 1, wherein the second sensor is integrated into the assistance motor.
- 9. (previously presented) The method according to Claim 1, wherein the torque rod is an integral part of steering column.
- 10. (previously presented) The method according to Claim 1, wherein the torque rod has controlled torsion.
- 11. (previously presented) The method according to Claim 10, wherein the steering column is a torque rod.